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(54) Title: DEVICE AND PROCESS FOR THE SIMULTANEOUS AGITATION OF REACTION MIXTURES

(57) Abstract: The present invention is in the field of the high-throughput research for liquid and multi-phase reactions. Thereby, the invention relates to a process for the simultaneous realization of at least one chemical reaction in at least two separate reaction vessels (10), wherein said process comprises at least the following steps: (i) providing at least one reaction mixture per reaction vessel (10); to (ii) pneumatic agitation of the reaction mixture in at least one reaction vessel by means of bringing the reaction mixture into contact with at least one fluid phase (18), wherein the at least one chemical reaction is carried out in at least one of the reaction vessels (10) in the batch mode and the reaction mixture contains at least one liquid phase (14). Thereby, the fluid phase (18) is supplied to the at least one reaction vessel (10) within a defined period and is at least partially discharged from the reaction vessel. The reaction mixture may further comprise another immiscible liquid phase (14') and/or solid phase (16). Furthermore, the present invention relates to the device, which pertains to the process.